

APPENDIX B
Statement of Findings for
Executive Order 11990 "Protection of Wetlands"

**Statement of Findings for Executive Order 11990
(Protection of Wetlands)**
Construction of New Visitor Facilities in the Entrance Area
Denali National Park and Preserve, Alaska

December 2001

Recommended:

Superintendent, Denali National Park and Preserve Date

Certified For Technical Accuracy and Servicewide Consistency:

Chief, Water Resources Division, Washington Office Date

Approved:

Regional Director, Alaska Region Date

PURPOSE AND NEED FOR ACTION

The National Park Service (NPS) has prepared and made available for public review an environmental assessment (EA) to evaluate the impacts of construction of new visitor services in the entrance area in Denali National Park and Preserve.

The approved 1996 Entrance Area and Road Corridor Development Concept Plan for Denali National Park and Preserve identified the need for the expansion of visitor services in the park entrance area. The current facilities do not provide a fully operational visitor center, environmental education center, meet current or future visitor needs, or address parking problems, traffic congestion, and safety hazards near the railroad depot.

The NPS and the Alaska Railroad (AKRR) are working cooperatively to improve the layout of the Alaska Railroad Depot in Denali National Park and Preserve. In addition, the NPS proposes to construct a visitor center with an efficient linkage to the depot in order to provide a park interpretive destination that would fit into the tight schedule of the package tour visitors being driven to their departing train. The NPS and AKRR propose to enlarge the existing facilities and parking lots, construct a new vehicular corridor into the depot area, and move the park road to the west of the former hotel site to provide room for the visitor center/depot complex. (see figures 2 and 3 of EA).

Executive Order 11990 (Protection of Wetlands) requires the NPS, and other federal agencies, to evaluate the likely impacts of actions in wetlands. The executive order requires that short and long-term adverse impacts associated with occupancy, modification or destruction of wetlands be avoided whenever possible. Indirect support of development and new construction in such areas should also be avoided wherever there is a practicable alternative.

To comply with these orders, the NPS has developed a set of agency policies and procedures which can be found in Director's Order 77-1: Wetland Protection, and Procedural Manual 77-1: Wetland Protection. The policies and procedures related to wetlands emphasize: exploring all practical alternatives to building on, or otherwise affecting, wetlands; reducing impacts to wetlands whenever possible; and providing direct compensation for any unavoidable wetland impact by restoring degraded or destroyed wetlands on other NPS properties.

The purpose of this Statement of Findings (SOF) is to present the NPS rationale for its proposed plan to construct portions of the railroad depot expansion and park road in the wetland area. This SOF also documents the anticipated effects on these resources.

WETLANDS WITHIN THE PROJECT AREA

Wetland boundaries were identified in the field with flagging by NPS personnel and later surveyed by contractors to determine wetland acreage. The U.S. Army Corps of Engineers (USACE) visited the project site in July 1999 and agreed with the wetlands delineation within the project area. Of the 13.1 acres affected by the proposed action, 1.1 acres (49,000 square feet) were classified as wetlands (figure 3 of EA) under the "Classification of Wetlands and Deepwater Habitats of the United States", the Cowardin Classification System (Cowardin et al. 1979), and are therefore subject to NPS wetlands compliance procedures. Of the total 13.1 acres

of disturbed land, 12.0 acres are upland, as evidenced by the white spruce-aspen associations, the lack of hydrologic indicators, and the presence of well-draining soils.

The wetlands located within the proposed project area consist of wet scrub-shrub and forested wetlands. The core area of wetlands is classified as Palustrine Scrub-Shrub, Broad-leaved Deciduous, Seasonally Flooded wetlands (PSS1B). The areas surrounding these core wetlands are classified as Palustrine Forested, Needle-leaved Evergreen, Seasonally-Flooded wetlands (PF04B). These wetlands provide habitat for small mammals, such as red squirrels, snowshoe hares, and porcupine; bird species, including gray jays, robins, thrushes, sparrows, and warblers. Moose frequent the area for forage, and it is considered potential moose calving area.

The major plant species on the wetland sites include black spruce, spruce hybrids, quaking aspen, willow, and alder. Common ground cover includes mosses, horsetails, and a variety of annual flowering plants. No threatened or endangered animal or plant species are found in the area and no research or reference sites have been developed in the project area.

No water supply points or wells are located between the project site and the Nenana River approximately one mile away. No floods are known from the site, as forests cover most of the adjacent land and gravelly soils which absorb the rainfall. The wetlands function to attenuate some snow melt surface flow during break-up, when the ground is still frozen. The amount of this function lost would need to be transferred to the large area of wetlands east of the airstrip via road, airstrip, and parking lot culverts.

The wetland type described above is common throughout the eastern areas of Denali National Park and Preserve. The park has determined that the potential wetlands located at the project site are locally common and have limited environmental significance for the area, in terms of surface water quality, including sediment control and water purification, animal habitat, and cultural resources.

THE PROPOSAL IN RELATION TO WETLANDS

The proposal and alternatives are described in detail in the project EA.

The construction of a new segment of park road and expansion of the Alaska Railroad Depot parking will impact a maximum of 1.1 acres of wetlands. The extent of disturbance is shown on the attached project plan.

To provide a stable subgrade on which to build the road, all wetland soil within the road prism and parking lots will be excavated to bedrock or suitable subgrade material with adequate bearing capacity. Wetland soil will be replaced with clean fill and compacted, and crushed aggregate will be placed on top of the subgrade.

Discharge of dredged or fill material into jurisdictional wetlands is regulated by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. According to a recent determination by Corps personnel, the project would not affect wetlands under the jurisdiction of the Corps (Don Rice, pers. comm.)

MITIGATION PROPOSED

Federal and NPS Policy is to avoid siting projects in wetlands whenever possible. If circumstances make it impracticable to avoid wetlands, then mitigation of unavoidable impacts must be planned. A NPS wetlands “no-net-loss” policy requires that wetland losses be compensated for by restoration of wetlands, preferably of comparable wetland type and function and in the same watershed (if possible).

Of the 13.1 acres affected by the proposed action, 1.1 acres are classified as wetlands. This statement of findings commits to full 1:1 compensation for the disturbed wetlands acreage.

On-Site Rehabilitation

As much as possible, disturbance of wetlands in and around the project area would be avoided. Any areas disturbed by construction activities would be restored to as near natural conditions as possible. Prior to the start of construction activities, the NPS would salvage as much topsoil, organic matter, and vegetation, as feasible, for later use in site revegetation. Salvaged material would be stockpiled separately and would be returned to the disturbed areas following construction.

Approximately 3.5 acres of disturbed lands will be revegetated with native plants after the completion of the construction activities. The Denali National Park and Preserve’s Resource Preservation and Research Division would perform all revegetation activities.

Off-Site Compensation (Wetland Restoration)

Compensation, by restoration of previously disturbed degraded wetlands, is required under the NPS no-net-loss policy for projects involving disturbance or loss of wetlands. Compensation will occur for the loss of 1.1 acres of palustrine wetland. One-for-one compensation will be completed elsewhere in the park by restoring a riverine and palustrine wetland in the Kantishna Hills region of the park (Figure 7). It is anticipated that the wetland functions and values lost at the project site will be balanced by those functions and values regained at a restored former placer mine site.

1.1 acres within the park’s Caribou Creek claims has been selected for restoration within the scope of this mitigation. These wetlands are classified as Riverine Upper Perennial Unconsolidated Shore with Intermittent Flooding (R3USJ), and Palustrine Unconsolidated Shore Cobble Gravel Seasonally Flooded/Well-Drained (PUS1D). Restoration plans include removing and disposing of debris; stabilizing the channel and floodplain; stabilizing the access road; and revegetating the stripped areas. Preliminary work includes water and soil sampling, and engineering surveys of the existing stream channel, floodplains, and upland topography. Discharge measurements will be collected to aid in stream channel design. Soil sampling will assess the geo-chemistry of the upper watershed, and determine the soil’s potential for revegetation efforts. Surveys, both cross-sectional and topographical, will be conducted to supplement site data on the NPS topographic maps. This information will be used to locate and estimate material amounts for use in recontouring the site and reconstructing the stream channel and floodplain.

Cost estimates for this project are approximately \$15,000 per acre, based on an unpublished report, “Cost Estimation for Reclamation, National Park Service, Alaska Regional Office, January 1994.”

This report reviewed three separate mining reclamation projects that were conducted on abandoned claims in Denali National Park and Preserve.

Stream channel and floodplain restoration will be based on the techniques of the Glen Creek restoration project at Denali. Project design requirements will include a channel capacity for a 1.5-year (bankfull) discharge and a floodplain capacity for up to a 100-year discharge. The project design will include the use of bio-revetment, located on meanders, to encourage channel stabilization using natural methods. Brush bars, located in areas of little or no fines, will be employed to dissipate floodwater energy and encourage sediment deposition. Riparian areas will be revegetated with willow cuttings and other appropriate vegetation. Depending on the results from the soils nutrient analysis, fertilizer will be used to ensure a quick start for new vegetation. Monitoring of the stream channel and riparian areas will occur to determine the success of the reclamation efforts. Vegetation plots and permanently mounted cross-sections will be surveyed and measured again after the first year. Additional seeding and revegetation will occur on areas not vegetated during the first year.

The funding source for the Caribou Creek restoration project will be a combination of park entrance fee money and park base funds. The work will be performed during FY 2003.

ALTERNATIVES CONSIDERED

Alternative 1, the preferred alternative, would construct a visitor center complex near the former hotel site and reroute the Denali Park Road around the visitor center facilities and depot, thereby solving traffic pedestrian concerns. The Denali Science and Learning Center (DSLCL) would be sited near these other facilities, but at a location where a quieter campus could be developed. Alternative 1 would impact about 1.1 acres of wetlands.

Alternative 2 describes the existing approved plans for the entrance area of Denali National Park and Preserve. This alternative considers completing approved actions under existing plans (the VTS EA, Frontcountry DCP/EIS, and Railroad Depot EA), which include expanded facilities, parking and improved circulation at the depot, expanded bus parking and concession facilities near the former hotel site, and the Denali Science and Learning Center (DSLCL) housed in some of the buildings of the former McKinley Park Hotel. It also includes an expanded VAC for use as a visitor center and constructing a visitor services building complex with a 3-6 acre parking lot near the VAC. The expansion of the depot facilities with realignment of the Denali Park Road between it and the DSLCL would solve many traffic/pedestrian safety concerns at the depot but not for the users of both facilities. Also, siting the visitor center near the VAC would not help attract package tour users of the depot to the visitor center. The parking expansion for the enlarged visitor center near the VAC and the depot expansion and road realignment would adversely impact 1.1 acres of wetlands.

Alternative 3 describes the existing conditions (No Action) in the entrance area. The park hotel closed at the end of 2001, so there remain no lodging or dining facilities in that area. Some former dilapidated hotel buildings remain. No visitor center would be constructed and no extended science and learning center would be established. No additional parking or areas for vehicle circulation would be constructed at the depot.

Several alternatives were discussed during the analysis process, but were eliminated from further evaluations. Restoring the McKinley Park airstrip was ruled out from further analysis. The park airstrip serves as an important base for emergency medical landings and private planes. It will remain open for NPS and general aviation use at existing levels until a suitable alternative is identified.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES ASSOCIATED WITH THE PROPOSED ACTION

The potential environmental consequences of the proposed action and alternative are fully described in the EA.

The realignment of a segment of the park road and expansion of the visitor services in the entrance area to include a visitor center complex, the DSLC, and railroad depot and parking expansion would cause about 13.1 acres of ground disturbance. This includes the loss of 1.1 acres of wetlands, and the loss of taiga communities, including white spruce and spruce hybrids, balsam poplar trees, and various shrubs including willow, alder, blueberry and Labrador tea. Area topography would be altered from the grading, cutting, and filling required to construct the visitor center complex, DSLC, depot facilities, new paths and utility corridors and the road realignment. Impacts to large mammal movements around the former McKinley Park Hotel and Alaska Railroad Depot area already exist due to pedestrian and vehicular traffic, and concentrated visitor use. Further expansion of visitor facilities in that area is unlikely to create additional impacts to large mammal movements. Wildlife, including small mammals, birds, and moose, would be temporarily displaced from their habitat during construction, and permanently displaced from 13.1 acres of habitat due to the depot expansion and road realignment. In comparison to the already approved plans collected within alternative 2, there would be a marginal decrease in impacts to moose calving habitat because the new park road realignment would only disturb higher quality habitat next to an existing road rather than create a new road corridor through the higher quality habitat.

No significant cumulative impacts on wildlife habitat or wildlife behavior would be anticipated from adding the proposed action to other regional activities due to the relatively large acreage of similar habitat nearby. Dust would be generated from the construction activities, creating a minor, short-term impact to air quality.

There is one recorded cultural site located within or nearby the project area. It is probable that a small cultural site classified as a pit and can burn (SI91-1) would be destroyed during parking lot sitework. Appropriate steps would be taken according to section 106 of the National Historic Preservation Act, as outlined in 36 CFR 800, in consultation with the Alaska State Historic Preservation Officer, and any other interested parties. Site documentation would be completed before construction at the site. If previously unrecorded or unknown sites are found during construction, work would be halted and a cultural resource specialist would be consulted.

Noise from the construction would create short-term, temporary disturbances to wildlife and area visitors. Construction activities would cause delays to pedestrian and vehicular traffic in the depot and hotel areas. In the long-term, the construction of a visitor center in conjunction with expansion of the railroad depot would have a positive impact on the visitor opportunities and

park management. Construction of a DSLC would provide an opportunity for in-depth programs about park resource values. The park entrance area would have improved visitor facilities, improved and safer vehicular and pedestrian access, and the interpretive facilities would be more likely to attract at least 90 % of the visitors to the visitor center. Travel to the park by railway and highway is expected to increase with these improvements, and may translate into an overall increase in tourist dollars to the local business communities.

CONCLUSION

The NPS concludes that alternative 1, the preferred alternative, to construct a visitor center in conjunction with an expanded depot and creating a campus for an extended learning program, would meet management objectives to improve visitor services in the entrance area of Denali National Park and Preserve. The park road would be re-routed around the visitor center. Alternative 2, implement existing approved plans for the entrance area, would not fully meet the NPS objectives to contact the majority of park visitors entering the park and provide opportunities for in-depth interpretation and exploration of park values. Alternative 3, existing conditions, fails to achieve any progress toward improvement of visitor services, correction of safety concerns at the depot, or establishment of an in-park science center. The project will be designed to avoid as much wetland area as possible.

As required by NPS wetland protection procedures, impacts on the 1.1 acres of palustrine wetlands will be compensated for, on a minimum 1-for-1 acreage basis, by restoring riverine and palustrine wetland habitat and associated riparian **habitat on Caribou Creek in the Kantishna Hills region of the park (formerly placer-mined stream and riparian habitat) in FY 2003. This project will be funded through a combination of entrance fee money and park base funds.** The NPS therefore finds the proposal to be consistent with Executive Order 11990, **NPS Director's Order # 77-1: Wetland Protection** and the NPS no-net-loss wetlands policy.

Figure 7. Wetlands Compensation Area